

In Memoriam: Anthony (Tony) Goodwin

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Anthony (Tony) Goodwin was a leading innovator in the field of thermophysics, and widely known as a researcher, author, and journal editor. Following his untimely death in December 2014, at the age of just 53, we review in this paper Tony's outstanding contributions to the field of thermophysics and recount some of the personal qualities that his many friends and colleagues in the community will cherish.

Tony excelled as an experimentalist and devoted much energy to improving a variety of experimental techniques to facilitate measurements of thermophysical properties either under wider ranges of conditions, or with lower uncertainty. In a career spanning academia and industry, he worked on a number of key problems that presented both scientific challenges and opportunities for industrial application. We mention in particular his work on measurements of the speed of sound, relative permittivity, fluid phase behaviour, density and viscosity. In his industrial career, Tony was responsible for the development and testing of sensors for measuring many of these same properties for purposes of downhole fluid analysis in the petroleum industry. He published around 100 articles in the archival scientific journals, edited a number of books, authored or co-authored numerous chapters and was granted a large number of patents. He was also a powerful influence within the Physical Chemistry Division of IUPAC and the International Association of Chemical Thermodynamics. Drawing both on our personal experiences of collaborating with Tony and on his published work, this paper will highlight his lasting scientific achievements.